

SCHEDULE 9.2.8
SIGNALING NETWORKS AND CALL-RELATED DATABASES

9.2.8 Signaling Network and Call-Related Databases.

9.2.8.1 Signaling Transfer Points. A Signaling Transfer Point (STP) is a signaling network function that includes all of the capabilities provided by the signaling transfer point switches (STPSs) and their associated signaling links which enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer point switches.

9.2.8.2 Technical Requirements.

9.2.8.2.1 STPs shall provide access to all other Network Elements connected to SBC-AMERITECH SS7 network. These include:

9.2.8.2.1.1 SBC-AMERITECH Local Switching or Tandem Switching;

9.2.8.2.1.2 SBC-AMERITECH Service Control Points/Databases;

9.2.8.2.1.3 Third-party local or tandem switching systems; and

9.2.8.2.1.4 Third-party-provided STPSs.

9.2.8.2.2 The connectivity provided by SBC-AMERITECH STPs shall support the signaling functionalities of all Network Elements connected to the SBC-AMERITECH SS7 network. This explicitly includes the use of the SBC-AMERITECH SS7 network to convey messages which neither originate nor terminate at a Signaling End Point directly connected to the SBC-AMERITECH SS7 network (i.e., transient messages). When the SBC-AMERITECH SS7 network is used to convey transient messages, there shall be no alteration of the Integrated Services Digital Network User Part (ISDNUP) or Transaction Capabilities Application Part (TCAP) user data that constitutes the content of the message.

9.2.8.2.3 If an SBC-AMERITECH Tandem Switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between an CLEC local switch and third party local switch, the SBC-AMERITECH SS7 network shall convey the TCAP messages that are necessary to provide Call Management features (Automatic Callback, Automatic Recall, and Screening List Editing) between the CLEC STPSs and the STPSs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to the SBC-AMERITECH STPSs, based upon the routing instruction provided in each message.

9.2.8.2.4 STPs shall provide all functions of the MTP as specified in ANSI T1.111. This includes:

9.2.8.2.4.1 Signaling Data Link functions, as specified in ANSI T1.111.2:

9.2.8.2.4.2 Signaling Link functions, as specified in ANSI T1.111.3; and

9.2.8.2.4.3 Signaling Network Management functions, as specified in ANSI T1.111.4.

9.2.8.2.5 STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112. In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4. In cases where the destination signaling point is an SBC-AMERITECH local or tandem switching system or database, or is an CLEC or third party local or tandem switching system directly connected to the SBC-AMERITECH SS7 network, STPs shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network connected with the SBC-AMERITECH SS7 network, and shall not perform SCCP Subsystem Management of the destination.

9.2.8.2.6 STPs shall also provide the capability to route SCCP messages based on ISNI, as specified in ANSI T1.118, when this capability becomes available on SBC-AMERITECH STPs.

9.2.8.2.7 Signaling Transfer Points (STPs)

9.2.8.2.7.1 The STP element is a signaling network function that includes all of the capabilities provided by the STP switches which enable the exchange of SS7 messages between switching elements, database elements and signaling transfer point switches via associated signaling links. STP includes the associated link interfaces.

9.2.8.2.7.2 SS7 Transport will apply to SS7 messages transported on behalf of CLEC from a SBC-AMERITECH designated STP pair to a SBC-AMERITECH STP pair located in a different LATA. In SBC-AMERITECH this arrangement will only be provided for STPs located in the same state. The Signal Switching and Signal Transport rates will apply to ISUP and TCAP messages.

9.2.8.2.7.3 In such instance as CLEC utilizes SBC-AMERITECH's Local Switching Network Element, CLEC does not separately order SS7

signaling under this method. CLEC will be charged for the use of the SBC-AMERITECH SS7 signaling on a per call basis.

9.2.8.2.8 STP Technical Requirements

9.2.8.2.8.1 STPs will provide signaling connectivity to the following network elements connected to the SBC-AMERITECH SS7 network: SBC-AMERITECH Local Switching or Tandem Switching; SBC-AMERITECH Service Control Points/Call Related Databases; Third-Party local or tandem switching systems; and Third-party-provided STPs.

9.2.8.2.8.2 The Parties will indicate to each other the signaling point codes and other screening parameters associated with each Link Set ordered by CLEC at the SBC-AMERITECH STPs, and where technically feasible, each Party will provision such link set in accordance with these parameters. CLEC may specify screening parameters so as to allow transient messages to cross the SBC-AMERITECH SS7 Network. The Parties will identify to each other the GTT type information for message routing. CLEC will pay a non-recurring charge when CLEC requests SBC-AMERITECH add GTT type information for message routing, in connection with its use of unbundled signaling.

9.2.8.2.9 Interface Requirements

9.2.8.2.9.1 SBC-AMERITECH will provide STP interfaces to terminate A-links, B-links, and D-links.

9.2.8.2.9.2 CLEC will designate the SPOI for each link. CLEC will provide a DS1 or higher rate transport interface at each SPOI. SBC-AMERITECH will provide intraoffice diversity to the same extent it provides itself such diversity between the SPOIs and the SBC-AMERITECH STPs.

9.2.8.2.9.3 SBC-AMERITECH will provide intra-office diversity to the same extent it provides itself such diversity between the SPOIs and the SBC-AMERITECH STPs.

9.2.8.2.10 STPs shall provide all functions of the OMAP commonly provided by STPs. This includes:

9.2.8.2.10.1 MTP Routing Verification Test (MRVT); and

9.2.8.2.10.2 SCCP Routing Verification Test (SRVT).

9.2.8.2.11 In cases where the destination signaling point is an SBC-AMERITECH local or tandem switching system or database, or is an CLEC or third party local or tandem switching system directly connected to the SBC-AMERITECH SS7 network,

STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPs in an SS7 network connected with the SBC-AMERITECH SS7 network. This requirement shall be superseded by the specifications for Internetwork MRVT and SRVT if and when these become approved ANSI standards and available capabilities of SBC-AMERITECH STPs.

9.2.8.2.12 STPs shall operate in accordance with the following requirements:

9.2.8.2.12.1 MTP Performance, as specified in ANSI T1.111.6; and

9.2.8.2.12.2 SCCP Performance, as specified in ANSI T1.112.5.

9.2.8.3 SS7 Transport.

9.2.8.3.1 Definition. Signaling Link Transport is a set of two (2) or four (4) dedicated 56 Kbps circuits between CLEC-designated Signaling Points of Interconnection (SPOI) that provides appropriate physical diversity.

9.2.8.3.2 Due to the fact that state gateway STPs are not interconnected, SS7 Transport provides for the routing and screening of SS7 messages from a SBC-AMERITECH pair of designated Gateway STPs (i.e., a mated pair) to another SBC-AMERITECH pair of STPs within the same state only. The screening of messages provides for CLEC designation of signaling points associated with CLEC and controls which messages may be allowed by the SBC-AMERITECH STP pairs. The routing of messages provides for the transfer of a complete message between signaling links, and for a Global Title Translation (GTT) of the message address, if needed.

9.2.8.3.3 SS7 Transport provides routing of messages for all parts of the SS7 protocol. These messages may support other applications and services such as, for example, CLASS services, Message Waiting services, Toll Free Database services, Line Information Data Base (LIDB) Services, Calling Name (CNAM) Database services, Advanced Intelligent Network (AIN) services and Telecommunications Industry Association Interim Standard-41 (IS-41) services. SS7 Transport will route messages to the global title address or to the signaling point code address of the message based on the translation information of SBC-AMERITECH's STP.

9.2.8.3.4 A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:

- a) No single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two (2) separate physical paths end-to-end); and

- b) No two (2) concurrent failures of facilities or equipment shall cause the failure of all four (4) links in a D-link layer (i.e., the links should be provided on a minimum of three (3) separate physical paths end-to-end).

9.2.8.4 Dedicated Signaling Links.

9.2.8.4.1 Dedicated Signaling Links provide interconnection to SBC-AMERITECH's signaling network. Each signaling link is a set of dedicated 56Kbps (or higher speed) circuits between CLEC STPs or switches and the SBC-AMERITECH STP mated pair. The CLEC designated Signaling Points of Interconnection (SPOI) are always collocated in the SBC-AMERITECH STP serving office. This means of collocation is required for access to the SBC-AMERITECH STP. The links are fully dedicated to the use of CLEC and provide the screening and routing usage for the SBC-AMERITECH STP to which the link is connected. Dedicated Signaling Links are available to CLEC for its use in furnishing SS7-based services or applications to their end users or other users of SS7 signaling information.

9.2.8.4.2 Dedicated Signaling Links include the following elements:

9.2.8.4.2.1 SS7 Link Cross Connect. The SS7 Link Cross Connect provides a DS-0 or DS1 connection in the SBC-AMERITECH STP building and connects the STP Port Termination to the CLEC SPOI.

9.2.8.4.2.2 STP Port Termination. The STP Port Termination is the physical termination of the signaling link (i.e. 56 kbps circuit) at a SBC-AMERITECH STP. A STP Port Termination is used for each 56 kbps SS7 Link Cross Connect terminated at a SBC-AMERITECH STP.

9.2.8.4.2.3 STP Access Link. The STP Access Link provides a 56-kilobit per second digital facility when CLEC requires an interoffice facility to connect from the CLEC SPOI to the STP location.

9.2.8.4.3 CLEC shall provide the portion of the signaling link from the CLEC premises within the LATA to the SBC-AMERITECH STP location or the CLEC SPOI. CLEC shall identify the DS1 or channel of a DS1 that will be used for the signaling link.

9.2.8.4.4 CLEC shall identify to SBC-AMERITECH the facility and channel to which the SS7 Link Cross Connect shall connect. If the facility does not terminate in the STP location SBC-AMERITECH shall provide a transport facility referred to as the STP Access Link. The STP Access Link will connect to the DS-0 cross connect at the STP location.

9.2.8.4.5 When CLEC uses an alternative DS1 facility or arranges, or agrees to allow, a physical degree of diversity or

performance that is not in accordance with the specifications of Telcordia technical publication, GR-905-CORE, CLEC acknowledges that the performance and reliability of the SS7 protocol may be affected and the performance and reliability standards described in GR-905-CORE may be disqualified.

9.2.8.4.6 Dedicated Signaling Links are subject to SBC-AMERITECH compatibility testing and certification requirements pursuant to the Network Operations Forum Reference Document, GR-905-CORE and SBC-12STATE Technical Publication TP76638. In SBC-AMERITECH, Technical Publication AM-TR-OAT000069 will apply in addition to the documents referenced above. and SBC-AMERITECH Technical Publication TP76638. Technical Publication AM TR OAT000069 will apply in addition to the documents referenced above. Each individual set of links from AT&T switch to SBC-12STATESTP will require a pre-ordering meeting to exchange and schedule testing certification by SBC-12STATE. Each individual set of links from AT&T switch to SBC-AMERITECH STP will require a pre-ordering meeting to exchange and schedule testing certification by SBC-AMERITECH.

9.2.8.4.6 Dedicated Signaling Links are subject to SBC-AMERITECH compatibility testing and certification requirements pursuant to the Network Operations Forum Reference Document, GR-905-CORE and SBC-AMERITECH Technical Publication TP76638. Technical Publication AM TR OAT000069 will apply in addition to the documents referenced above. Each individual set of links from CLEC switch to SBC-AMERITECH STP will require a pre-ordering meeting to exchange and schedule testing certification by SBC-AMERITECH.

9.2.8.4.7 Technical Requirements.

9.2.8.4.7.1 Dedicated Signaling Link shall consist of full duplex mode 56 Kbps transmission paths.

9.2.8.4.7.2 Dedicated Signaling Link shall perform in the following two (2) ways:

- a) As an "A-link" which is a connection between a switch or SCP and a Signaling Transfer Point Switch (STPS) pair; and
- b) As a "D-link" which is a connection between two (2) STP mated pairs in different company networks (e.g., between two (2) STPS pairs for two Competitive Local Exchange Carriers (CLECs)).

9.2.8.4.7.3 When CLEC provides its own switch or STP, CLEC will provide DS1 (1.544 Mbps) interfaces at the CLEC-designated SPOIs. DS1 transport to the SPOI can be provided for, as previously indicated, via existing transport facilities,

CLEC-provided facilities or through CLEC purchase of an SBC-AMERITECH dedicated transport facility, previously referred to as the "Access Connection". Each 56 Kbps transmission path will appear as a DS0 channel on the DS1 interface.

9.2.8.4.7.4 In each LATA in which CLEC desires Dedicated Signaling Links for interconnection to the SBC-AMERITECH SS7 Signaling Network, CLEC may purchase dedicated signaling links to each STP of a mated pair of STPs.

9.2.8.4.7.5 CLEC assumes the responsibility to ensure diverse routing of CLEC signaling links from CLEC switch to CLEC SPOI. SBC-AMERITECH will provide the same amount of diversity as it provides to itself in terms of diverse routing of interoffice facilities, should such facilities be necessary.

9.2.8.4.7.6 When CLEC requests that SBC-AMERITECH add a Signaling Point Code (SPC), CLEC will identify to SBC-AMERITECH the SPCs associated with the CLEC set of links and will pay a non-recurring charge per STP pair at the rates set forth in the **Pricing Schedule** (UNE pricing - "Point Code Addition").

9.2.8.4.7.7 CLEC will notify SBC-AMERITECH in writing thirty (30) days in advance of any material change in CLEC's use of such SS7 signaling network, including but not limited to any change in CLEC SS7 Dedicated Signaling Links, SS7 Transport and/or STP.

9.2.8.4.7.8 Interface Requirements. There shall be a DS1 (1.544 Mbps) interface at the CLEC-designated SPOI. Each 56 Kbps circuit shall appear as a DS0 channel within the DS1 interface.

9.2.8.5 Manner of Provisioning.

9.2.8.5.1 The following describes the manner of provisioning for SS7 services. Each Party will work cooperatively with the other Party and will each provide knowledgeable personnel in order to provision, test and install SS7 Service in a timely fashion.

9.2.8.5.2 SS7 Transport

9.2.8.5.2.1 CLEC shall use SS7 Transport subject to the screening and routing information of the SBC-AMERITECH STPs, as provided in this Section 9.8.5.2.1. SBC-AMERITECH shall provide information to CLEC on the routes and signaling point codes served by the SBC-AMERITECH STPs. SS7 Transport shall route ISUP messages for the purpose of establishing trunk voice paths between switching machines.

9.2.8.5.2.2 SS7 Transport shall route TCAP queries when feasible pursuant to the SS7 Protocol to the SBC-AMERITECH "regional" STP pair that

directly serves the database of TCAP message. SS7 Transport shall route TCAP responses from a SBC-AMERITECH “regional” STP pair to another SBC-AMERITECH STP pair.

9.2.8.5.2.3 SS7 Transport provides a signaling route for messages only to signaling points to which SBC-AMERITECH has a route. SS7 Transport does not include the provision of a signaling route to every possible signaling point. When SBC-AMERITECH does establish a route to a signaling point in a mated pair of STPs, the route may not be available to other SBC-AMERITECH pairs of STPs, until ordered. When SBC-AMERITECH or CLEC, pursuant to a service order, arranges to establish a route to a signaling point, such route to the other signaling point or other signaling network will be used by all signaling points within, and connected to, the SBC-AMERITECH signaling network pursuant to the standard requirements of the SS7 protocol.

9.2.8.5.3 Disputes concerning the association of a signaling point among specific link sets associated with a SBC-AMERITECH mated STP will be resolved by consultation with the signaling point owner, as defined in the Local Exchange Routing Guide (LERG), Section 1, assignment of SPC.

9.2.8.5.4 Dedicated Signaling Links

9.2.8.5.4.1 CLEC shall designate the signaling points and signaling point codes associated with CLEC. CLEC shall provide such information to SBC-AMERITECH to allow SBC-AMERITECH to translate SBC-AMERITECH STPs. The information shall define the screening and routing information for the signaling point codes of CLEC and may include global title address, translation type and subsystem designations as needed.

9.2.8.5.4.2 Signaling links from SBC-AMERITECH mated pairs of STPs shall connect to CLEC premises (including collocation locations) within the same LATA. A set of links can be either:

9.2.8.5.4.2.1 "A" Link Sets from CLEC's Signaling Point (SP)/Service Switching Point (SSP). A minimum of two links will be required, one from the SP/SSP to each STP; or,

9.2.8.5.4.2.2 "B" Link Sets from CLEC's STPs that are connected to SBC-AMERITECH's mated pair of STPs. A minimum of four links will be required (i.e. a "quad") between the two pairs of STPs. (This same arrangement is sometimes referred to as a set of “D” links.)

9.2.8.5.4.3 A STP Port Termination and SS7 Link Cross Connect is required for each 56-kbps access link utilized for the Service. STP locations are set forth in the National Exchange Carrier Association, Inc. (NECA) Tariff FCC No. 4.

9.2.8.5.4.4 A pre-order meeting will define the SBC-AMERITECH facility availability and the degree of diversity in both the SBC-AMERITECH physical network and the CLEC physical network from signaling point to signaling point for the link.

9.2.8.5.4.5 All applicable signaling point codes for each signaling link must be installed at each of SBC-AMERITECH's interconnecting STPs.

9.2.8.5.4.6 Call set-up times may be adversely affected when CLEC, using SS7 signaling, employs Intermediate Access Tandems (IATs) in its network. SBC-AMERITECH makes no warranties with respect to call set-up times when multiple STP pairs are involved or when the signaling traffic is exchanged between two non-SBC-AMERITECH signaling points.

9.2.8.5.4.7 Provisioning of the SS7 Service is in accordance with SBC-AMERITECH AM TR OAT000069 and GR-905-CORE, as amended.

9.2.8.5.5 Use of the STP. When CLEC orders SBC-AMERITECH unbundled Local Switching, the use of the STP shall apply. No order or provisioning by CLEC is needed. The SBC-AMERITECH Local Switch will use the SBC-AMERITECH SS7 signaling network.

9.2.8.6 Responsibilities of SBC-AMERITECH.

9.2.8.6.1 SBC-AMERITECH shall manage the network and, at its sole discretion, apply protective controls; provided that SBC-AMERITECH promptly notify CLEC of the application of such controls. Protective controls include actions taken to control or minimize the effect of network failures or occurrences, which include, but are not limited to, failure or overload of SBC-AMERITECH or CLEC facilities, natural disasters, mass calling or national security demands.

9.2.8.6.2 SBC-AMERITECH shall determine the GTT route for messages routed to GTT, which are associated with SBC-AMERITECH signaling points.

9.2.8.6.3 SBC-AMERITECH shall define regional functions and local functions of its STPs. SBC-AMERITECH will route ISUP messages within the SBC-AMERITECH signaling network, subject to technical feasibility. Capacity limitations shall define a temporary technical infeasibility until the capacity limit can be resolved.

9.2.8.6.4 SBC-AMERITECH shall route messages generated by the action of CLEC throughout the SBC-AMERITECH signaling network as specified within this Schedule. The content of the messages is for the use of signaling points of origination and destination. SBC-AMERITECH will not use any information within messages for any purpose not required by or related to the use of the SBC-AMERITECH signaling network.

SBC-AMERITECH will not divulge any message or any part of messages generated by CLEC to any other party, except as required to manage the SBC-AMERITECH signaling network or as may be required by law.

9.2.8.7 Responsibilities of CLEC.

9.2.8.7.1 CLEC shall provision the signaling links at CLEC's premises and from CLEC's premises to SBC-AMERITECH's STP location in a diverse, reliable and technically feasible manner. CLEC shall identify to SBC-AMERITECH the SPC(s) associated with the CLEC set of links.

9.2.8.7.2 CLEC shall identify to SBC-AMERITECH the GTT information for messages that route to CLEC.

9.2.8.7.3 When routing messages addressed to an SBC-AMERITECH Subsystem Number (SSN), CLEC shall use the SBC-AMERITECH defined SSN designation of the SBC-AMERITECH mated STP pair to which the message is routed.

9.2.8.7.4 CLEC shall transfer Calling Party Number Parameter information unchanged, including the "privacy indicator" information, when ISUP Initial Address Messages are interchanged with the SBC-AMERITECH signaling network.

9.2.8.7.5 CLEC shall furnish to SBC-AMERITECH, at the time the SS7 Service is ordered and annually thereafter, an updated three (3) year forecast of usage of the SS7 Signaling network. The forecast shall include total annual volume and busy hour busy month volume. SBC-AMERITECH shall utilize the forecast in its own efforts to project further facility requirements.

9.2.8.7.6 CLEC shall inform SBC-AMERITECH in writing thirty (30) days in advance of any change in CLEC's use of such SS7 Service which alters by ten percent (10%) for any thirty (30) day period the volume of signaling transactions by individual SS7 service that are planned by CLEC to be forwarded to SBC-AMERITECH's network. CLEC shall provide in said notice the reason, by individual SS7 service, for the volume change.

9.2.8.8 Description of Rate Elements.

9.2.8.8.1 There are three types of charges that apply for SS7 Access. They are recurring, usage and nonrecurring charges. Recurring and nonrecurring charges apply for each port that is established on a STP. Usage charges apply for each Initial Address Message (IAM) or TCAP (excluding LIDB Access Service, 800 Access Service TCAP messages and LNP Database Access Query TCAP messages) message that is switched by the local STP and transported to an SBC-AMERITECH end office or for each IAM and TCAP message that is switched by the local STP in a hubbing arrangement.

9.2.8.8.2 Nonrecurring charges apply for the establishment of Originating Point Codes (OPC) and Global Title Address (GTA) Translations. An OPC charge applies for each OPC established, as well as each OPC added or changed subsequent to the establishment of STP Access. The OPC charge applies on a per service basis. A GTA Translation charge applies for each service or application (excluding LIDB Access Service and 800 Carrier-ID-Only Service) that utilizes TCAP messages. A GTA Translation charge also applies for each service (excluding LIDB Access Service and 800 Carrier-ID-Only Service) added or changed subsequent to the initial establishment of STP Access.

9.2.8.8.3 Signal Formulation. An IAM Formulation usage charge will be assessed for each IAM message formulated at the SBC-AMERITECH tandem for CLEC to SBC-AMERITECH terminated calls.

9.2.8.8.4 Signal Transport. An IAM Signal Transport usage charge will also be assessed for each IAM message that is transported from the local STP to the SBC-AMERITECH end office for terminating traffic. A TCAP Signal Transport usage charge will be assessed for each TCAP message that is transported from the local STP to the SBC-AMERITECH end office (excluding LIDB and 800 Access Service).

9.2.8.8.5 Signal Switching. An IAM Signal Switching usage charge will be assessed for each IAM message that is switched by the local STP for each IAM messages that is switched for direct routed terminating traffic. A TCAP Signal Switching usage charge will be assessed for each TCAP message that is switched by the local STP termination of non-call associated signaling messages (excluding LIDB and 800 Access Service).

9.2.8.8.6 Signal Tandem Switching. An IAM Signal Tandem Switching usage charge will be assessed for an IAM message that is switched by an SBC-AMERITECH STP and transported to an end office for tandem routed terminating traffic. When Signal Tandem Switching usage charges are assessed, Signal Switching and Signal Transport charges do not apply, except for SS7 Transport.

9.2.8.9 Database Services.

9.2.8.9.1 Definition. Call related databases are defined as set forth in FCC Rule 51.319. Without limiting the foregoing it includes Call related Network Elements that provide the functionality for storage of, and access to, information required to route and complete a particular call. Call related databases include LIDB, CNAM, toll free number database, and AIN databases.

9.2.8.9.2 Technical Requirements for Call Related Databases.

9.2.8.9.2.1 Requirements for call related databases within this section address storage of information, access to information (e.g., signaling protocols,

response times), and administration of information (e.g., provisioning, administration, and maintenance). All call related databases shall be provided to CLEC in accordance with the following requirements, except where such a requirement is superseded by specific requirements set forth in Sections 9.2.8.9.2.3 through 9.2.8.9.2.5 below:

9.2.8.9.2.2 SBC-AMERITECH shall provide physical interconnection to SCPs through the SS7 network and protocols, as specified in 9.2.8.3 (Signaling and Signaling System 7) of this Agreement, with TCAP as the application layer protocol.

9.2.8.9.2.3 SBC-AMERITECH shall provide physical interconnection to databases via existing interfaces and industry standard interfaces and protocols.

9.2.8.9.2.4 The reliability of interconnection options shall be consistent with requirements for diversity and survivability as specified in the industry standard technical reference (which applies to both SS7 and non-SS7 interfaces).

9.2.8.9.2.5 Call related database functionality shall be available at parity.

9.2.8.9.2.6 SBC-AMERITECH shall complete database transactions (i.e., add, modify, delete) for CLEC subscriber records stored in SBC-AMERITECH databases at parity through the processes set forth in Article XXXIII (Operations Support Systems) of this Agreement.

9.2.8.9.2.7 SBC-AMERITECH shall provide database maintenance consistent with the maintenance requirements set forth in Article III (Interconnection) of this Agreement.

9.2.8.9.2.8 SBC-AMERITECH shall provide billing and recording information to track database usage consistent with connectivity billing and recording requirements for call related databases as specified in Article XXVII (Billing) of this Agreement (e.g., recorded message format and content, timeliness of feed, data format and transmission medium).

9.2.8.9.2.9 SBC-AMERITECH shall provide call related databases in accordance with the physical security requirements set forth in Article VI (Network Security) of this Agreement.

9.2.8.9.2.10 SBC-AMERITECH shall provide call related databases in accordance with the logical security requirements set forth in Article VI (Network Security) of this Agreement.

9.2.8.9.3 Toll Free Routing Service.

9.2.8.9.3.1 The Toll Free Routing Service provides for the identification of the carrier to whom a call is to be routed when a toll-free (1+800-NXX-

XXXX or 1+888-NXX-XXXX) call is originated by Customer. This function uses the dialed digits to identify the appropriate carrier and is done by screening the full ten digits of the dialed number. The Toll Free Routing Service may be provided in conjunction with a Customer's InterLATA or IntraLATA Switched Exchange Access Service.

9.2.8.9.3.2 When Toll Free Routing Service is provided, an originating call is suspended at the first switching office equipped with a Service Switching Point (SSP) component of the SSC/SS7 Network. The SSP launches a query over signaling links (A-links) to the Signal Transfer Point (STP), and from there to the SCP. The SCP returns a message containing the identification of the carrier to whom the call should be routed and the call is processed.

9.2.8.9.3.3 SBC-AMERITECH SS7 network is used to transport the query to the SBC-AMERITECH SSP then to the SBC-AMERITECH SCP. Once CLEC's identification is provided, CLEC may use the information to route the toll-free traffic over its network. In these cases, SBC-AMERITECH Switched Access services are not used to deliver a call to CLEC. The toll-free carrier ID data may not be stored for CLEC's future use.

9.2.8.9.4 Routing Options. In addition to the toll-free service offerings, new routing options are offered. These options are purchased by toll-free service providers to allow their clients to define complex routing requirements on their toll-free service. Toll-free routing options allow the service provider's Customer to route its toll-free calls to alternate carriers and/or destinations based on time of day, day of week, specific dates or other criteria. These routing options are in addition to the basic toll-free call routing requirements which would include the toll-free number, the intraLATA carrier, the interLATA carrier and the Area of Service (AOS).

9.2.8.9.5 Carrier Identification. CLEC may choose the 800 Carrier Identification service to obtain toll-free number screening. With this service, CLEC will launch a query to the SBC-AMERITECH database using its own Service Switching Points (SSPs) network. In contrast to the Call Routing Service described in Section 9.2.8.9.3 above, with the 800 Carrier Identification service, no routing is performed.

9.2.8.9.6 Number Administration. CLEC, at its option, may elect to use SBC-AMERITECH's toll-free Service which includes toll-free Number Administration Service (NAS). With this service, SBC-AMERITECH will perform the Responsible Organization service, which involves interacting with the national Service Management System (SMS/800), on behalf of the Customer. Responsible Organization services include activating, deactivating and maintaining 800/888 number records as well as trouble referral and clearance. If CLEC does not select NAS, CLEC will perform the Responsible Organization service.

9.2.8.10 LIDB Database Service.

9.2.8.10.1 LIDB is a transaction-oriented database system that functions as a centralized repository for data storage and retrieval. LIDB is accessible through CCS networks. LIDB contains records associated with End User line numbers and special billing numbers. LIDB accepts queries from other network elements and CLEC's network, and provides return result, return error, and return reject responses as appropriate. Examples of information that Account Owners might store in LIDB and in their Line Records are: ABS Validation Data, Originating Line Number Screening (OLNS) data, and ZIP Code data. The query originator need not be the owner of LIDB data.

9.2.8.10.2 LIDB Service provides CLEC with certain line information that CLEC may use to facilitate completion of calls or services. SBC-AMERITECH provides LIDB Service Validation and Originating Line Number Screening (OLNS) Queries pursuant to the terms and conditions specified in Tariff FCC No. 2.

9.2.8.11 Calling Card Validation.

9.2.8.11.1 SBC-AMERITECH shall permit CLEC to access SBC-SBC-AMERITECH's LIDB to validate calling card numbers and requests for bill-to-third party or collect billing. SBC-AMERITECH shall provide LIDB access in a non-discriminatory manner by a SS7 formatted data query to determine the validity of the billing method requested by the caller.

9.2.8.11.2 Technical Requirements.

9.2.8.11.2.1 SBC-AMERITECH shall enable CLEC to store in SBC-AMERITECH's LIDB any subscriber line number or special billing number record, whether ported or not, for which the NPA-NXX or NXX-0/1XX group is supported by that LIDB.

9.2.8.11.2.2 SBC-AMERITECH shall perform the following LIDB functions for CLEC's subscriber records in LIDB:

9.2.8.11.2.2.1 Billed number screening (provides information such as whether the billed number may accept collect or third number billing calls); and

9.2.8.11.2.2.2 Calling card validation.

9.2.8.11.2.3 SBC-AMERITECH shall process CLEC's subscriber in a nondiscriminatory manner as compared to SBC-AMERITECH retail customer records with respect to other LIDB functions. SBC-AMERITECH shall indicate to CLEC what additional functions (if any) are performed by LIDB in SBC-AMERITECH's network.

9.2.8.11.2.4 Within two (2) weeks after a request by CLEC, SBC-AMERITECH shall provide CLEC with a list of the subscriber data items which CLEC would have to provide in order to support billed number screening and calling card

validation. The list shall indicate which data items are essential to LIDB function, and which are required only to support certain services. For each data item, the list shall show the data formats, the acceptable values of the data item and the meaning of those values.

9.2.8.11.2.5 SBC-AMERITECH shall provide CLEC with nondiscriminatory access to LIDB functionality including but not limited to rates of operating deficiencies.

9.2.8.11.2.6 Intentionally left blank.

9.2.8.11.2.7 All additions and updates of CLEC data to the LIDB shall be solely at the direction of CLEC. SBC-AMERITECH will process orders from other CLECs or from SBC-AMERITECH for subscribers that choose to migrate from CLEC to another provider.

9.2.8.11.2.8 SBC-AMERITECH shall provide priority updates to LIDB for CLEC data upon CLEC's request to support fraud protection as set forth in Article VI (Fraud Control, Network Security and Law Enforcement) of this Agreement.

9.2.8.12 Calling Name Delivery Service.

9.2.8.12.1 SBC-AMERITECH will provide CLEC with access to SBC-AMERITECH's Calling Name Database for CNAM query. CNAM query allows CLEC to retrieve the name associated with a calling number for use in CLEC's Calling Name Delivery Service (CNDS). All CLEC Queries to SBC-AMERITECH's CNAM Database shall use a translations type of 005 and a subsystem number in the calling party address field that is mutually agreed upon by the Parties. CLEC acknowledges that such subsystem number and translation type values are necessary for SBC-AMERITECH to properly process Queries to its CNAM Database.

9.2.8.12.2 A Customer who subscribes to Caller ID with Name may see the listed name associated with the calling party's telephone line displayed on his/her Caller ID display unit. The telephone number associated with the telephone line of the calling party will also be displayed.

9.2.8.12.3 SBC-AMERITECH shall charge CLEC for the CNAM Query as set forth in the Pricing Schedule.

9.2.8.12.4 The signaling interface between the CLEC or other local switch and the toll free number database shall use the TCAP protocol as specified in Section 9.2.8.3 (SS7 Transport) of this Schedule.

9.2.8.13 Price and Payment.

9.2.8.13.1 CLEC will pay SBC-AMERITECH a per-Query rate for each Query initiated into SBC-AMERITECH's LIDB and/or CNAM Database . CLEC will also pay SBC-AMERITECH a per-Query Transport Rate for each Validation and OLNS Query initiated into SBC-AMERITECH's LIDB. These rates are set forth in **Pricing Schedule**.

9.2.8.13.2 CLEC will pay a Service Establishment Nonrecurring Charge for each point code CLEC requests to activate, change, rearrange, or modify for its LIDB Service and/or CNAM Query. These rates are set forth in the **Pricing Schedule**. This nonrecurring charge applies per point code.

9.2.8.13.3 CLEC will also pay a Service Order Nonrecurring Charge for each request for service order activity to establish, change, rearrange, or modify LIDB Service, LIDB Service Application and/or CNAM Query. The Service Order Nonrecurring Charge is set forth in the **Pricing Schedule**.

9.2.8.13.4 CLEC will make payment to SBC-AMERITECH for LIDB and/or CNAM Database Service based upon the rates set forth in the **Pricing Schedule**. All tariffed rates associated with LIDB and/or CNAM Database Services provided hereunder are subject to change effective with any revisions of such tariffs.

9.2.8.13.5 SBC-AMERITECH will record usage information for CLEC's LIDB and/or CNAM Database Service Queries terminating to SBC-AMERITECH's LIDB. SBC-AMERITECH will use its SCPs as the source of usage data.

9.2.8.13.6 If there is a dispute associated with a monthly bill, the disputing Party will notify the other in writing within ninety (90) calendar days of the date of said monthly bill or the dispute shall be waived. Each Party agrees that any amount of any monthly bill that that Party disputes will be paid by that Party as set forth in Article XXVII.

9.2.8.13.7 CLEC will notify SBC-AMERITECH when CLEC discontinues use of an OPC used to Query LIDB and/or CNAM Database.

9.2.8.13.8 SBC-AMERITECH will apply all applicable Nonrecurring Charges to changes in previously established OPCs (other than disconnects of OPCs) as set forth in Sections 9.2.8.13.2 and 9.2.8.13.3.

9.2.8.13.9 Both Parties understand and agree that when CLEC uses a single OPC to originate Queries to SBC-AMERITECH's LIDB and/or CNAM Database, neither Party can identify to the other, at the time the Query and/or Response takes place, when such Queries support CLEC's CLEC operations within SBC-AMERITECH's incumbent serving areas and when such Queries support other uses of CLEC's service platforms.

9.2.8.13.10 If CLEC operates in more than one (1) State in SBC-AMERITECH's incumbent region, SBC-AMERITECH will apply company-level rates to the LIDB and/or CNAM Database Services provided to CLEC under this Agreement. SBC-AMERITECH will develop these company-level rates based upon the rates established in the relevant States in its incumbent region(s) and an analysis of comparative usage of each state's LIDB and/or CNAM Database information.

9.2.8.14 Ownership of Information.

9.2.8.14.1 Telecommunications companies depositing information in SBC-AMERITECH's LIDB (i.e., Data Owners) retain full and complete ownership and control over such information. CLEC obtains no ownership interest by virtue of this Appendix.

9.2.8.14.2 Unless expressly authorized in writing by parties, CLEC will not use LIDB Service for purposes other than those described in this Schedule. CLEC may use LIDB Service for such authorized purposes only on a call-by-call basis. Data accessed on LIDB may not be stored by CLEC elsewhere for future use.

9.2.8.14.3 Proprietary information residing in SBC-AMERITECH's LIDB is protected from unauthorized access and CLEC may not store such information in any table or database for any reason. All information that is related to alternate billing service is proprietary. Examples of proprietary information are as follows:

- | | |
|------------|---|
| Number | 9.2.8.14.3.1 Billed (Line/Regional Accounting Office (RAO)) |
| | 9.2.8.14.3.2 PIN Number(s) |
| | 9.2.8.14.3.3 Billed Number Screening (BNS) indicators |
| Equipment) | 9.2.8.14.3.4 Class of Service (also referred to as Service or |
| | 9.2.8.14.3.5 Reports on LIDB usage |
| | 9.2.8.14.3.6 Information related to billing for LIDB usage |
| | 9.2.8.14.3.7 LIDB usage statistics |

9.2.8.14.4 CLEC will not copy, store, maintain, or create any table or database of any kind based upon information it received in a Response from SBC-AMERITECH's LIDB.

9.2.8.14.5 If CLEC acts on behalf of other carriers, CLEC will prohibit its Query-originating carrier customers from copying, storing, maintaining, or creating any

table or database of any kind based upon information they receive in a Response from SBC-AMERITECH's LIDB.

9.2.8.15 Limitation of Liability.

9.2.8.15.1 A Party's sole and exclusive remedy against the other Party for injury, loss or damage caused by or arising from anything said, omitted or done in connection with this Schedule regardless of the form of action, whether in contract or in tort (including negligence or strict liability) shall be the amount of actual direct damages and in no event shall exceed the amount paid for LIDB and/or CNAM Database Service.

9.2.8.15.2 The remedies as set forth above in this Schedule shall be exclusive of all other remedies against a Party, its affiliates, subsidiaries or parent corporation, (including their directors, officers, employees or agents).

9.2.8.15.3 In no event shall SBC-AMERITECH have any liability for system outage or inaccessibility, or for losses arising from the unauthorized use of the data by LIDB and/or CNAM Database Service purchasers.

9.2.8.15.4 SBC-AMERITECH is furnishing access to its LIDB and/or CNAM Database to facilitate CLEC's provision of services to its End Users, but not to insure against the risk of non-completion of any call. While SBC-AMERITECH agrees to make every reasonable attempt to provide accurate LIDB and/or CNAM Database information, the Parties acknowledge that Line Record and/or CNAM Database information is the product of routine business service order activity and/or fraud investigations. CLEC acknowledges that SBC-AMERITECH can furnish Line Record and CNAM Database information only as accurate and current as the information has been provided to SBC-AMERITECH for inclusion in its LIDB. Therefore, SBC-AMERITECH, in addition to the limitations of liability set forth, is not liable for inaccuracies in Line Record or CNAM Database information provided to CLEC or to CLEC's Query originating carrier customers except for such inaccuracies caused by SBC-AMERITECH's willful misconduct or gross negligence.

9.2.8.16. Liability Provisions Applicable to Calling Name Information Service.

9.2.8.16.1 CALLING NAME INFORMATION PROVIDED TO CLEC BY SBC-AMERITECH HEREUNDER SHALL BE PROVIDED "AS IS". SBC-AMERITECH MAKES NO WARRANTY, EXPRESS OR IMPLIED, REGARDING THE ACCURACY OR COMPLETENESS OF THE CALLING NAME INFORMATION REGARDLESS OF WHOSE CALLING NAME INFORMATION IS PROVIDED. SBC-AMERITECH, IN ADDITION TO ANY OTHER LIMITATIONS OF LIABILITY SET FORTH IN THIS AGREEMENT, SHALL NOT BE HELD LIABLE FOR ANY LIABILITY, CLAIMS, DAMAGES OR ACTIONS INCLUDING ATTORNEYS' FEES, RESULTING DIRECTLY OR INDIRECTLY FROM ACTS OR OMISSIONS IN

CONNECTION WITH CLEC's OR CLEC'S END USERS' USE OF THE CALLING NAME INFORMATION.

9.2.8.16.2 CLEC acknowledges that SBC-AMERITECH's Calling Name Database limits the Calling Name Information length to fifteen (15) characters. As a result, the Calling Name Information provided in a Response to a Query may not reflect a subscriber's full name. Name records of residential local telephone subscribers will generally be stored in the form of last name followed by first name (separated by a comma or space) to a maximum of fifteen (15) characters. Name records of business local telephone subscribers will generally be stored in the form of the first fifteen (15) characters of the listed business name that in some cases may include abbreviations. CLEC also acknowledges that certain local telephone service subscribers may require their name information to be restricted, altered, or rendered unavailable. Therefore, SBC-AMERITECH, in addition to any other limitations of liability set forth in this Agreement, is not liable for any liability, claims, damages or actions including attorney's fees, resulting directly or indirectly from the content of any Calling Name Information contained in SBC-AMERITECH's Calling Name Database and provided to CLEC or CLEC's query-originating carrier customers, except for such content related claims, damages, or actions resulting from SBC-AMERITECH's willful misconduct or gross negligence.

9.2.8.16.3 CLEC acknowledges that certain federal and/or state regulations require that local exchange telephone companies make available to their subscribers the ability to block the delivery of their telephone number and/or name information to the terminating telephone when the subscriber originates a telephone call. This blocking can either be on a call-by-call basis or on an every call basis. Similarly, a party utilizing blocking services can unblock on a call-by-call or every call basis.

9.2.8.16.4 CLEC acknowledges its responsibility to, and agrees that it will abide by, the blocking/unblocking information it receives in SS7 protocol during call set-up. CLEC agrees not to attempt to obtain the caller's name information by originating a Query to SBC-AMERITECH's Calling Name Database when call set-up information indicates that the caller has requested blocking of the delivery of his or her name and/or number. CLEC also agrees not to block delivery of Calling Name Information on calls from blocked lines when the caller has requested unblocking. Therefore, SBC-AMERITECH, in addition to the limitations of liability set forth in this **Section 9.2.8.16**, is not liable for any failure by CLEC or CLEC's Query-originating carrier customers to abide by the caller's desire to block or unblock delivery of Calling Name Information, and CLEC agrees, in addition to any other indemnity obligations set forth in this Agreement, to hold SBC-AMERITECH harmless from and defend and indemnify SBC-AMERITECH for any and all liability, claims, damages, actions, costs losses, or expenses, including attorney's fees, resulting directly or indirectly from CLEC's or CLEC's Query-originating carrier customers' failure to block or unblock delivery of the Calling Name Information when appropriate indication is provided, except for such privacy-related claims, damages or actions caused by SBC-AMERITECH's willful misconduct or gross negligence.

9.2.8.17 Communication and Notices. Ordering and billing inquiries for the services described herein from SBC-AMERITECH shall be directed to the Local Service Center (LSC).

9.2.8.18 Confidentiality. The Parties' Proprietary Information is subject to the terms and conditions of **Article XX** of this Agreement.

9.2.8.19 Mutuality. CLEC agrees to make its Line Record Information available to SBC-AMERITECH. Should CLEC store its Line Record information in a database other than SBC-AMERITECH's, CLEC will make such Information available to SBC-AMERITECH through an industry standard technical interface and on terms and conditions set forth by applicable tariff or by a separate agreement between SBC-AMERITECH and the database provider. SBC-AMERITECH agrees to negotiate in good faith to reach such an agreement. If SBC-AMERITECH is unable to reach such agreement, chooses not to enter into an agreement with such a database provider, or chooses to discontinue using the services of such database provider, CLEC acknowledges that such CLEC Line Record information will be unavailable to any customer, including any CLEC's customer, that is served by SBC-AMERITECH's service platforms (e.g., Operator Service Systems, Signaling Transfer Points, and/or switches).

9.2.8.20 Unbundled AIN Application Process.

9.2.8.20.1 The AIN architecture establishes a network infrastructure in which subscriber services can be defined and implemented independent from End-Office Switches. This is accomplished by a combination of SS7 signaling, interfaces between Network Elements and call-state models through which AIN Network Elements interact.

9.2.8.20.2 Upon request by CLEC, and where technically feasible, SBC-AMERITECH will provide CLEC with access to SBC-AMERITECH's Advanced Intelligent Network (AIN) platform, AIN Service Creation Environment (SCE) and AIN Service Management System (SMS) based upon ILEC-specific rates, terms, conditions and means of access to be negotiated by the Parties pursuant to Section 252 of the Act, and incorporated into this Agreement by Article, Schedule or amendment, as applicable, subject to approval by the appropriate state Commission.